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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,284	10/22/2003	Pascale Richalet-Secordel	740073.461	7129

500 7590 12/21/2006  
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC  
701 FIFTH AVE  
SUITE 5400  
SEATTLE, WA 98104

EXAMINER
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GRUN, JAMES LESLIE

ART UNIT	PAPER NUMBER
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1641

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/692,284

Applicant(s)

RICHALET-SECORDEL ET AL.

Examiner

James L. Grun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 18 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 25-32, 39-47 and 53-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24, 33-38 and 48-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 12/22/03; 4/27/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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Applicant's election without traverse of Group I, claims 1-24, 33-38, and 48-52 in the Paper filed 18 October 2006 is acknowledged. Claims 25-32, 39-47, and 53-64 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-24, 33-38, and 48-52 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 and claims dependent thereupon, "the" interaction and amount lack antecedent basis. It is not clear what level is encompassed by "a major part."

In claims 2 and 3, it is not clear what is being further limited because each of the analytes is previously recited as binding to a respective one of the ligands.

In claims 8 and 9, "the...influence" lacks antecedent basis.

In claims 15-17, "the" capability lacks antecedent basis.

In claims 21 and 22, "based on" is vague as to what is encompassed.

In claim 33 and claims dependent thereupon, "the" interaction, amount, and influence lack antecedent basis. It is not clear what level is encompassed by "a major part."

In claim 37, "based on" is vague as to what is encompassed.

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In claim 48 and claims dependent thereupon, "the" interaction and amount lack antecedent basis. It is not clear what level is encompassed by "a major part."

In claims 49 and 50, it is not clear what is being further limited because each of the analytes is previously recited as binding to a respective one of the ligands.

In claim 51, "based on" is vague as to what is encompassed.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-24, 33-38, and 48-52 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Malmqvist et al. (WO 90/05306).

Malmqvist et al. characterized the interactions of groups of antibodies (i.e. analytes or ligands) with macromolecules (i.e. groups of epitopes (ligands or analytes)) by binding and binding competition of immobilizing and/or soluble antibodies specific for a particular macromolecule on sensor surfaces determined by surface plasmon resonance. Groups of monoclonal antibodies (e.g. 3-5 antibodies/group) can be tested sequentially with macromolecule epitopes immobilized either chemically or by binding via different ones of the epitopes (see e.g. pages 6-11). Different groups of epitopes can be tested by protein engineering or fragmenting of a macromolecule or by using macromolecules from different pathological conditions (see e.g. pages 12-13). Different polyclonal antibody populations can be tested for the repertoire of

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epitopes bound by anti-macromolecule antibodies (see page 13). Antibodies can be used to test macromolecule mixtures (see page 14). A regeneration solution was used between runs of the sensor (see e.g. pages 17 and 19). The reference specifically exemplifies at least 6 epitopes on the p24 macromolecule that can simultaneously bind antibodies specific therefor (see e.g. page 23).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stålberg (WO 93/25910) teaches sensors with co-immobilized ligands for determinations of multiple analytes.

Malmqvist et al. (US 5,492,840) teach sensors for the simultaneous determination of multiple analytes or multiple properties of a single analyte.

Sullivan et al. (US 6,803,202) teaching grouping of ligands for determination of samples having an unknown analyte.

McDevitt et al. (US 6,680,206) teach an array having multiple ligands for the determination of multiple analytes.

Delenstarr (US 6,428,957) teaches a self-assembling array for multiplexed assays.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Grun, Ph.D., whose telephone number is (571) 272-0821. The examiner can normally be reached on weekdays from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le, SPE, can be contacted at (571) 272-0823.

The phone number for official facsimile transmitted communications to TC 1600, Group 1640, is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application, or requests to supply missing elements from Office communications, should be directed to the Group receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*lrg*

James L. Grun, Ph.D.  
December 15, 2006

*Long V. Le*  
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